

Amendment to the Claims:

1. (Currently Amended) A positioning method for a radio system, the method comprising:

receiving signals at a unit of the system;

5 | applying at least one test on the received signals prior to processing the signals to select a processing operation on the signals, the operation being one of the following: a correlation processing operation, and a leading edge processing operation; and

 then effecting the selected operation ~~selected~~.

2. (Currently Amended) The method of claim 1, wherein applying the test ~~applied~~ comprises:

 determining whether a ~~the~~ signal level of the received signal is above a threshold value.

3. (Currently Amended) The method of claim 2, ~~wherein,~~ when further including:

in response to the level of the received signal ~~is being~~ below the threshold value, selecting the correlation processing operation ~~is selected~~.

4. (Currently Amended) The method of claim 2 further comprising[[,]]:

 when the level of the received signal is above the threshold value, testing whether a ~~the~~ leading edge gradient is above a gradient threshold value.

5. (Currently Amended) ~~The A~~ positioning method of claim 3 for a radio system, the method comprising:

receiving signals at a unit of the system;

5 | applying at least one test on the received signals to select a processing operation on the signals, the operation being one of the following: a correlation processing operation, and a leading edge processing operation; and

10 then effecting the operation selected;
 wherein the test applied comprises determining whether a signal level
 of the received signal is above a threshold value;
 wherein, when the level of the received signal is below the threshold
 value, the correlation processing operation is selected;
 wherein, when ~~the~~a leading edge gradient is below ~~the~~a gradient
 threshold value, the leading edge processing operation is selected.

 6. (Currently Amended) The method of claim 4, ~~wherein, when~~further
 including:
 in response to the leading edge gradient ~~is being~~ above the gradient
 threshold value, selecting the correlation processing operation ~~is selected~~.

 7. (Currently Amended) The method of claim 1, comprising:
 repeating the test application and operation steps at predetermined
 intervals.

 8. (Currently Amended) The method of claim 1, further comprising:
 coherently superposing received pulses before the test application step.

 9. (Currently Amended) The method of claim 1 comprising:
 convolution of a pulse with a bump function.

 10. (Currently Amended) The method of claim 1, further
 comprising~~[[.]]~~:

5 ~~when the~~in response to a signal level ~~is being~~ below a ~~the~~ signal level
 threshold, extending a receiving time period for the signal and applying the at least
 one test again.

11. (Currently Amended) The method of claim 1, further comprising[.],

before testing whether a~~the~~ leading edge gradient is above a threshold value, reducing a~~the~~ next transmit period.

12. (Currently Amended) The method according to claim 1, further comprising;

reducing a~~the~~ time period for a~~the~~ leading edge test for operation in a power-saving mode.

13. (Currently Amended) The method according to claim 1, further comprising;

effecting the leading edge processing operation after selection with no intermediate testing or processing.

14. (Currently Amended) The method according to claim 1 comprising measuring ~~the~~ a gradient using the formula:

$$i = Cdv/Dt$$

Where, V =voltage of ~~the~~ a signal waveform,

C =capacitance,

i =current, and

t =time.

15. (Currently Amended) The method according to claim 1 wherein the leading edge processing operation comprises;

differentiating ~~the~~ a received signal voltage or peak and locating ~~the~~ a zero-crossing (point of inflexion).

16. (Currently Amended) A computer program product directly loadable into ~~the~~ a internal memory of a digital computer, comprising;

software code portions for controlling the digital computer to perform performing the method of claim 1 when said product is run on a computer.

17. (Currently Amended) A ~~computer program embodied on a~~
computer-readable medium and ~~directly loadable into the internal memory of a digital~~
~~computer, comprising~~ carrying software code portions for controlling a computer to
perform ~~performing~~ the method of claim 1 when said ~~program software code~~ is run
5 on ~~a the~~ computer.

18-19. (Cancelled)

20. (Currently Amended) A positioning apparatus for a radio system,
the apparatus comprising:

a receiver means to receive radio frequency signals at a unit of the
system which have potentially suffered at least one of noise degradation and multi-
5 path degradation in a propagation environment;

testing means to apply at least one test for testing on the received radio
frequency signals for at least noise degradation and multi-path degradation and
selecting to select a processing operation on the signals which from among the
10 following: a correlation processing operation[[.]] and a leading edge processing
operation based on the testing; and

a processing means to effect the operation selected for subsequently
processing the tested radiofrequency signals with the selected one of the correlation
based processing operation and the leading edge processing operation.

21. (Currently Amended) The apparatus of claim 20, wherein the
testing means includes: comprising

means to determine whether a the-signal level of the received radio
frequency signal is above a threshold value.

22. (Currently Amended) The apparatus of claim 21, wherein the testing means includes: comprising

means ~~to select~~which selects the correlation processing operation when in response to the signal level of the received signal is being below the level threshold value.

23. (Currently Amended) The apparatus of claim 22, wherein the testing means includes: comprising

means to test signals with signal level above the level threshold value to determine whether the signal has a leading edge gradient is above a gradient threshold value, ~~when the level of the received signal is above the threshold value.~~

24. (Currently Amended) The apparatus of claim ~~22~~ comprising claim 23, wherein the testing means includes:

means ~~to select~~ which selects:

the leading edge processing operation[.,]-~~when in response to the~~ leading edge gradient is being below the gradient threshold value, and

the correlation processing operation in response to the leading edge gradient being above the gradient threshold value.

25. (Cancelled)

26. (Currently Amended) The apparatus of any of claim 20, comprising wherein the testing means includes:

means to cause the testing means to repeat the testing application and operation steps at predetermined intervals.

27. (New) The method of claim 3, further including:
- when the level of the received signal is above the threshold value,
testing whether a leading edge gradient is above a gradient threshold value;
 - in response to the leading edge gradient value being below the gradient
5 threshold value, performing the leading edge processing operation on the signal;
 - response to the leading edge being above the gradient threshold value,
performing the correction processing operation on the signal.